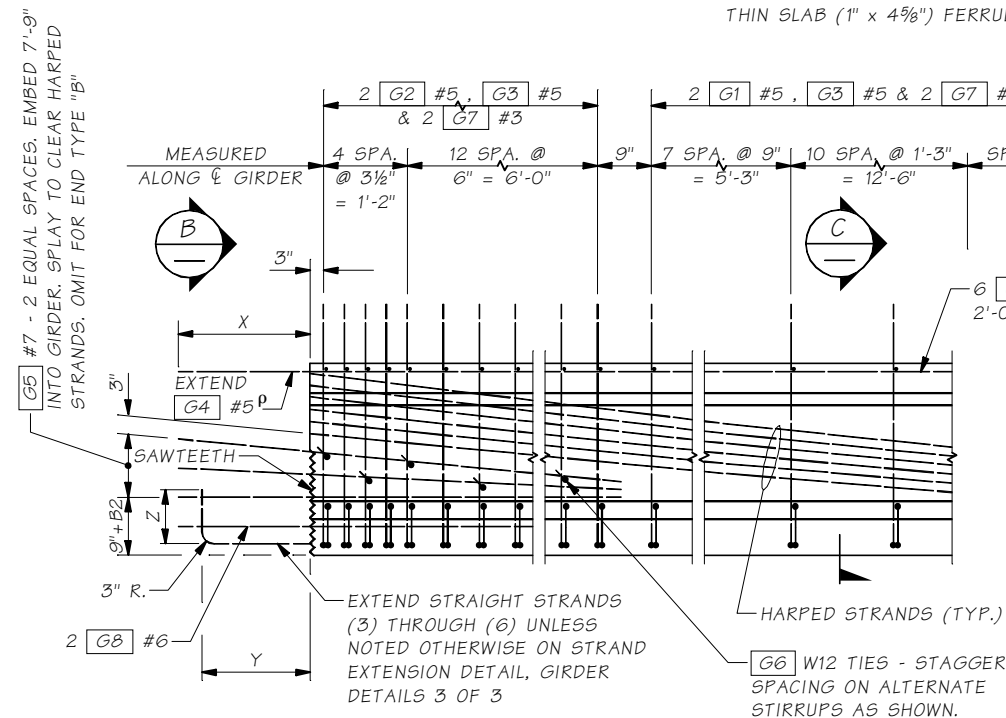


GIRDER ELEVATION

* OMIT HOLES AND PLACE INSERTS ON THE INTERIOR FACE OF EXTERIOR GIRDERS. PLACE HOLES AND INSERTS PARALLEL TO SKEW. INSERTS SHALL BE 1" Ø BURKE HI-TENSILE, LANCASTER MALLEABLE, DAYTON-SUPERIOR F-62 FLARED THIN SLAB (1" x 4 5/8") FERRULE OR APPROVED EQUAL. (TYP.)



TYPICAL END ELEVATION

END TYPE C SHOWN, OTHER END TYPES SIMILAR

^p FIELD BENDING REQUIRED TO OBTAIN 1 1/2" CONCRETE COVER AT PAYMENT SEAT.

(stirrup spacing shall be determined by the designer)

FOR END TYPE "C"	
ENDS AHEAD ON STATION	
[G5] BARS LEFT OF £	
B1 = 0" ([G4], [G8])	
B2 = 0" ([G5])	
ENDS BACK ON STATION	
[G5] BARS RIGHT OF £	
B1 = 1 1/2" ([G4], [G8])	
B2 = 3" ([G5])	

MARK	LOCATION	SIZE
G1	GIRDER STIRRUPS	5
G2	GIRDER END STIRRUPS	5
G3	GIRDER TOP FLANGE	5 STR.
G4	GIRDER LONGIT. FULL LENGTH	5 STR.
G5	GIRDER END LONGIT.	7 STR.
G6	GIRDER END TIES	W12 δ
G7B	GIRDER BOT. FLANGE TIES	3
G8	GIRDER END LONGIT.	6 STR.
G9B	GIRDER BOT. FLANGE TIES	3
G10B	GIRDER BOT. FLANGE TIES	3

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Washington State
Department of Transportation

STANDARD
PRESTRESSED CONCRETE GIRDERS

W32BTG GIRDER
DETAILS 1 OF 3

GIRDER NOTES

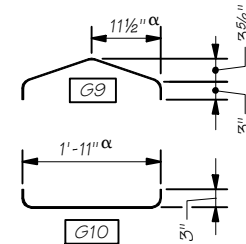
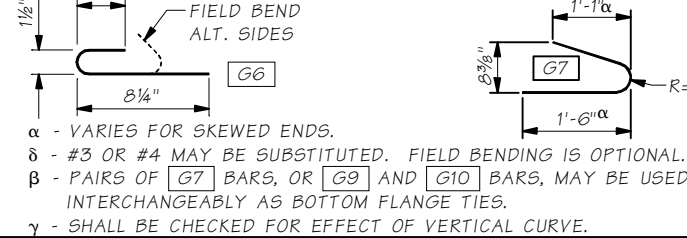
- PLAN LENGTH SHALL BE INCREASED AS NECESSARY TO COMPENSATE FOR SHORTENING DUE TO PRESTRESS AND SHRINKAGE.
- ALL PRETENSIONED AND TEMPORARY STRANDS SHALL BE 0.6" Ø LOW RELAXATION STRANDS (AASHTO M203 GRADE 270.)
- FOR END TYPES A, C AND D CUT ALL STRANDS FLUSH WITH THE GIRDER ENDS AND PAINT WITH AN APPROVED EPOXY RESIN, EXCEPT FOR EXTENDED STRANDS AS SHOWN. FOR END TYPE B CUT ALL STRANDS 1" BELOW CONCRETE SURFACE AND GROUT WITH AN APPROVED EPOXY GROUT.
- THE TOP SURFACE OF THE GIRDER FLANGE SHALL BE ROUGHENED IN ACCORDANCE WITH SECTION 6-02.3(25)H OF THE STANDARD SPECIFICATIONS.
- LIFTING EMBEDMENTS SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 6-02.3(25)L OF THE STANDARD SPECIFICATIONS.
- CAUTION SHALL BE EXERCISED IN HANDLING AND PLACING GIRDERS. ALL GIRDERS SHALL BE CHECKED BY THE CONTRACTOR TO ENSURE THAT THEY ARE BRACED ADEQUATELY TO PREVENT TIPPING AND TO CONTROL LATERAL BENDING DURING SHIPPING. ONCE ERECTED, ALL GIRDERS SHALL BE BRACED Laterally TO PREVENT TIPPING UNTIL THE DIAPHRAGMS ARE CAST AND CURED.
- FORMS FOR BEARING PAD RECESSES SHALL BE CONSTRUCTED AND FASTENED IN SUCH A MANNER AS TO NOT CAUSE DAMAGE TO THE GIRDER DURING THE STRAND RELEASE OPERATION.
- TEMPORARY TOP STRANDS SHALL BE EITHER PRETENSIONED OR POST-TENSIONED IN ACCORDANCE WITH SECTION 6-02.3(25)L OF THE STANDARD SPECIFICATIONS AND THE GIRDER DETAILS SHEETS. THE LIFTING LOCATION "L" AND CONCRETE RELEASE STRENGTH "F'CI" SHOWN IN THE GIRDER SCHEDULE ASSUME THAT THE TEMPORARY TOP STRANDS ARE PRETENSIONED. ALTERNATIVELY, POST-TENSIONED TEMPORARY TOP STRANDS MAY BE USED IF THE LIFTING POINTS IN THE GIRDER SCHEDULE ARE MAINTAINED AND THE STRANDS ARE STRESSED PRIOR TO LIFTING THE GIRDER FROM THE FORM.
- FOR DIAPHRAGMS, OMIT HOLES AND PLACE INSERTS ON THE INTERIOR FACE OF EXTERIOR GIRDERS. PLACE HOLES AND INSERTS PARALLEL TO SKEW. INSERTS SHALL BE 1" Ø MEADOWBURKE MX-3 HI-TENSILE, 1" Ø x 5 1/2" WILLIAMS F22 OPEN FERRULE INSERT, 1" Ø x 4 5/8" DAYTON-SUPERIOR F-62 FLARED THIN SLAB FERRULE INSERT OR APPROVED EQUAL.

INTERMEDIATE DIAPHRAGM:
1/3 points of span for span lengths 80'-0" to 120'-0"
1/2 points of span for span lengths less than 40'-0" to 80'-0"
No intermediate diaphragm for span lengths 40'-0" or less.

Diaphragm Type	END TYPE	BEARING RECESS	X	Y	Z	SAWTEETH
End Diaph. on Girder	A	YES	1'-10"	1'-6"	9"	YES
"L" Abutment	B	YES	0"	0"	0"	NO
Hinge Diaph. on Interm. Pier	C	NO	1'-10"	1'-6"	9"	YES
Fixed Diaph. @ Interm. Pier	D	NO	1'-10"	ALT. 1 OR ALT. 2 STRAND EXTENSION		YES

BENDING DIAGRAM (ALL DIMENSIONS ARE OUT TO OUT)

NOTE: FOR DIMENSION "A", SEE "GIRDER SCHEDULE"



Bridge Design Engr.	M:\STANDARDS\Girders\Bulb Tee Girder\W32BTG1.man	REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Supervisor		10	WASH.			
Designed By		JOB NUMBER				
Checked By						
Detailed By						
Bridge Projects Engr.						
Prelim. Plan By						
Architect/Specialist	DATE	REVISION	BY	APPD		